ARTICLE APPEARED
ON PAGE 91

THE ECONOMIST
31 March 1984

SCIENCE AND TECHNOLOGY

America debates secrecy in science

WASHINGTON, DC

Ever since the Vietnam war produced student upheavals on American campuses, the universities have been patiently mending their fences with the defence department. For good reason. The Pentagon decides who gets six out of every 10 dollars the American government spends on R&D. Now the rejuvenated partnership is being rocked again, this time by academic staff. This issue: how much secrecy should there be in science?

At the centre of the row is a new directive the Pentagon has drafted to change the small print of research contracts it awards to university scientists. If implemented, it will give defence department officials the right to preview the papers scientists want to publish as a result of any Pentagon-sponsored work they do. In the case of certain "sensitive" research areas, the Pentagon will be allowed to insist on changes, or to prevent publication altogether.

The new directive has upset, but not surprised, the universities. The Reagan administration has been grumbling since taking office that they share some blame for what it sees as America's dwindling superiority in military technology. Officials say garrulous scientists are too eager to divulge their findings—often, unwittingly, to the Soviet Union. Last November, for example, the Federal Bureau of Investigation arrested a suspected KGB agent posing as an East German physicist at a meeting of the American Vacuum Society in Boston.

Civilian scientists argue that there is a trickle, not a haemorrhage, of potential military secrets through scientific conferences and journals. University cryptographers already submit research papers to the National Security Agency before publication. In 1982, the National Academy of Sciences said there was a case for keeping a small number of equally sensitive research areas under similar wraps. But the cryptography arrangement is voluntary. Compulsory secrecy, the academy warned, could further erode America's scientific edge by curtailing the tradition of open communications which stimulates new discoveries.

The argument is a sub-plot in a wider drama. For two years, the administration has been trying to bring order into the muddle of regulations which govern the export of technology—scientific information as well as hardware. At the last count, more than 40 federal agencies in 10 government departments had some jurisdiction. A mammoth review of the system being conducted jointly by the National Security Council and the White House Office of Science and Technology is still incomplete. But the administration has settled one territorial issue: the defence department, not commerce, is to play the leading role.

That could be bad news for the campuses. The presidents of half a dozen leading universities, including Harvard, MIT and Stanford, are planning to tell the defence department that it will have to do without the expertise of their scientists if it insists on bringing in the new research contracts. At a meeting with the department last week, the universities said that, while they had no quarrel with decisions to classify research with a direct bearing on national security, they would not waive in advance their right to publish findings on an entire smorgasbord of supposedly "sensitive" technologies.

Dr Edith Martin, the Pentagon's deputy undersecretary for research and advanced technology, greeted the warning with scepticism. She wondered aloud whether even the most exalted universities would really step out of the bidding for lucrative defence contracts. Nor, she said, should they. The new contract provisions would apply only to sensitive applied research and, even then, the Pentagon would use its powers of censure sparingly.

Would it? The Pentagon's definition of sensitive research is notoriously fuzzy. Virtually anything on an unpublished 700-item list of "militarily critical technologies" can be labelled sensitive. While a much-ballyhooed attempt to streamline the list has become bogged down in defence department bureaucracy, the services continue to make promiscuous use of it. In November, for instance, air force officials barred British scientists from a meeting on materials science at the University of Dayton, Ohio. That action brought a protest from Britain's committee of vice-chancellors. American universities intend to be equally vigilant—if they can afford to be.

STAT